VEGETATION CLASSIFICATION AND SURVEY

International Association for Vegetation Science (IAVS)

Vegetation Classification and Survey 5: 1–10
doi: 10.3897/VCS.118454

EDITORIAL

Vegetation Classification and Survey is performing well

Jürgen Dengler[1,2], Idoia Biurrun[3], Florian Jansen[4], Wolfgang Willner[5,6]

1 *Vegetation Ecology Research Group, Institute of Natural Resource Sciences (IUNR), Zurich University of Applied Sciences (ZHAW), Wädenswil, Switzerland*
2 *Plant Ecology, Bayreuth Center of Ecology and Environmental Research (BayCEER), University of Bayreuth, Bayreuth, Germany*
3 *Plant Biology and Ecology, Faculty of Science and Technology, University of the Basque Country UPV/EHU, Bilbao, Spain*
4 *Landscape Ecology, Faculty of Agricultural and Environmental Sciences, University of Rostock, Rostock, Germany*
5 *Vienna Institute for Nature Conservation and Analyses (VINCA), Vienna, Austria*
6 *Department of Botany and Biodiversity Research, University of Vienna, Vienna, Austria*

Corresponding author: Jürgen Dengler (juergen.dengler@zhaw.ch)

Published 19 January 2024

Abstract

On the occasion of the completion of the fourth volume of Vegetation Classification and Survey (VCS), we have analysed the performance of the journal since its inception. The number of papers and pages show a moderate increase over the years. VCS has been included in the Scopus database for more than a year and received its first CiteScore of 2.0 in summer 2023 but is not yet included in the Web of Science Core Edition. We therefore used data from the Scopus database to compare the citation impact of articles in VCS with that of 29 other ecological journals. By calculating normalized citation rates per journal and publication year, we found that VCS started at the bottom of the rankings in the first two years (28th out of 30) but improved to 26th in 2022 and 14th in 2023. Together with the known time lag and the strong positive relationships between the different citation metrics, this allows a projection of the future development of the CiteScores and, after inclusion in the Web of Science, the Journal Impact Factor (JIF). Using the Field-Weighted Citation Impact (FWCI) from the Scopus database, we identified the top 12 out of 95 VCS articles published in the first four years that received more citations than expected for their age and field. We also present the four Editors' Choice papers of 2023, among which Strohbach and Strohbach (2023; Vegetation Classification and Survey 4: 241–284) received the Editors' Award in 2023. We conclude that VCS is on the right track, supported by the fact that in 2024 most authors will still be charged no or very low article processing charges (APCs).

Abbreviations: APC = article processing charge; IAVS = International Association for Vegetation Science; JIF = Journal Impact Factor; OA = open access; VCS = Vegetation Classification and Survey; WoS = Web of Science Core Edition.

Keywords

article processing charge (APC), bibliometry, CiteScore, Field-Weighted Citation Impact (FWCI), gold open access, high-impact paper, International Association for Vegetation Science (IAVS), normalized citation rate, publication trend, Scopus, vegetation classification, Web of Science

Introduction

With this editorial, we start the fifth volume of Vegetation Classification and Survey (VCS), a gold open access journal of the International Association for Vegetation Science (IAVS). The fourth volume was successfully completed due to the efforts of Subject Editors, Linguistic Editors, reviewers, publisher and, of course, the authors. On this occasion we reflect on the challenges and constraints of the "gold open access" path and how we can deal with

them. We assess the performance of VCS using bibliometric analyses in the context of general developments in the publishing landscape, both in terms of published papers and of citation rates. We use this information to make projections of the widely used journal-based citation metrics for VCS in the next few years. Further, we highlight the particularly well-cited articles that have been published since the start of the journal, present the Editors' Choice papers of 2023, and provide an outlook for the new year.

The challenges of gold open access

VCS was founded as a gold open access (OA) journal, which means that authors must pay article processing charges (APCs) for the publication once a manuscript is accepted, while the content of the journal is freely available to everybody without payment. In the current publishing landscape, gold OA is essentially the only viable model for new journals as hardly any library or private person would pay for a new subscription journal because there is a strong tendency to reduce the number of existing subscriptions. We have previously argued that a diamond OA solution, where the publication is free for both authors and readers, would be advantageous (Jansen et al. 2020; Dengler 2023), but currently there are no funding models that would cover the costs of publishing in this case. While hardly anyone would object to the OA philosophy that scientific results (which were mostly generated with public money) should be freely accessible to anybody (BOAI 2002), the gold OA solution has several severe drawbacks. Most importantly, (i) it creates barriers to authors of quality studies who do not have access to OA funding and (ii) it incentivises quantity over quality (Beall 2012; Bohannon 2013; Cobo 2014; Jansen et al. 2020; Smith et al. 2021; Dengler 2023 and references therein).

For a new journal in a relatively narrow research field like VCS, authors are generally reluctant to submit papers to journals that are not yet included in the two major bibliometric databases, Web of Science and Scopus. If, in addition, they have to pay considerable APCs, while most other journals in the field (Journal of Vegetation Science, Applied Vegetation Science, Phytocoenologia, Tuexenia) are subscription journals without obligatory APCs and have a Journal Impact Factor (JIF; i.e. are included in the Web of Science Core Edition), this could diminish the willingness to submit manuscripts considerably. We are therefore very grateful that our mother organisation, the International Association for Vegetation Science (IAVS), waived the APCs for its members during the initial years. This generous support helped to attract good papers during the past four years, but it was always clear that these subsidies could not last forever, and ultimately IAVS expects VCS to generate some profit to be used for activities of the association, as do the two other IAVS journals, Journal of Vegetation Science and Applied Vegetation Science (Chytrý et al. 2023). Thus, we Chief Editors have agreed with IAVS on a solution that should make VCS financially self-sustaining latest in 2025, while at the same time we wanted to avoid the high APCs charged by most other gold OA journals, which would be particularly problematic in the research field covered by VCS, where many authors are based in the Global South or in small institutions in richer countries and do not have access to APC funding. The plan is that those authors who have access to APC funding schemes in their institutions or countries should pay a fee that is higher than the actual costs to allow all those without such opportunities to publish (almost) without impediment. So far, this solution has worked reasonably well. In 2023, thanks to APC payments from some authors in (mostly) rich countries, we could offer free publishing to all other IAVS members and at the same time we did not need as much subsidies from IAVS. Thus, we are very grateful to those IAVS members who paid the regular APCs to enable this philanthropic approach. To approach the break-even-point, in 2024 for the first time there will be obligatory, but low APCs for those IAVS members from high-income countries.

Development of VCS in the context of other ecological journals

The fourth volume of VCS is the most content-rich so far. With 25 articles it equalised the previous maximum in 2021. However, as the articles were on average longer than in the first three years, the page number reached a new maximum of 360 (+ 16% compared to the previous maximum). After four years, VCS shows a non-significant positive trend, which contrasts with most other journals in the field (Table 1). It thus confirms a pattern we already described in last year's editorial for the time until 2022 (Dengler et al. 2023a). When comparing VCS with 29 other journals relevant for vegetation ecologists, from regional journals of botanical societies, like Tuexenia or Plant Sociology, to the top journals in ecology in general, such as Global Change Biology and Nature Ecology & Evolution, the pattern strongly changed around the anomaly of the Covid-19 years 2020/2021 (see also Dengler 2023). Until 2020, these 30 journals combined showed a mean annual increment in article numbers of 12.0%, but this value dropped to only 3.2% from 2020 onwards. The patterns are more contrasting when separating the two mega-journals in the list (Diversity, Frontiers in Ecology and Evolution, which are produced by publishers of which various problematic practices are known that have often been termed "predatory" e.g. Oviedo-García 2021; Dengler 2023), from the other 28 journals (which comprise both OA and subscription journals, owned by either scholarly associations or publishers). The content of the two mega-journals on average grew by 50.5% annually from 2014 to 2020 and by 34.8% annually afterwards, while the other 28 journals grew at an annual rate of 9.8% before and shrunk by 3.9% after 2020. Looking closer at

the 28 journals individually, before 2020 only 12 had a negative trend, but after 2020 this number increased to 25, with only Agriculture, Ecosystems & Environment, VCS and Nature Ecology & Evolution having a small positive trend (Table 1). While this result assures us that we are on a good path in the development of VCS, the negative to strongly negative trends in many other traditional journals raises serious concerns because the four out of 30 analysed journals with the strongest negative trend in recent years are vegetation ecological journals publishing on similar topics as we (Folia Geobotanica, Phytocoenologia, Tuexenia, Journal of Vegetation Science) (Table 1). We can only hope that most of these journals will find a way back to their old strength because without other strong journals in the field, VCS cannot be successful in the long run.

Bibliometric performance of VCS

The sheer quantity of articles, of course, does not tell anything about the relevance of the published content. If one is to compare the relative position of a journal in the field, then journal-based citation metrics are needed, in particular the Journal Impact Factor (JIF) from the Web of Science Core Edition (WoS) and the CiteScore from the Scopus database. The challenge with this approach is that new jour-

Table 1. Development of article numbers in 30 selected ecological journals over the past 10 years, including VCS (marked blue) and the two other IAVS journals (marked green). Likewise, the five years when Phytocoenologia was published in collaboration with IAVS are marked in green. The article numbers were taken from Web of Science (WoS) except for 2023 (databasing incomplete) and Tuexenia (data erroneous in several years). Data for journals or years within journals not covered by WoS were retrieved from Scopus. Data for VCS, Tuexenia and all journals in 2023 were taken from the respective journal website. Data extraction for the years until 2022 was done on 23 December 2023, that for 2023 on 8 January 2024. The change rates are based on an exponential regression model applied to all years as well as 2014–2020 and 2020–2023 separately, but considering only the years after foundation of a journal (i.e. without the NA's). The table is sorted according to decreasing growth in the recent four years.

Journal	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Annual change full period	Annual change until 2020	Annual change since 2020
Diversity [MDPI]	NA	NA	31	54	129	246	487	684	1141	1225	74.3%	101.9%	38.8%
Frontiers in Ecology and Evolution	79	151	155	166	238	503	499	1005	1315	1131	37.5%	34.8%	31.3%
Agriculture, Ecosystems & Environment	346	303	498	360	378	286	322	457	386	420	1.5%	-2.1%	6.5%
Vegetation Classification and Survey	NA	NA	NA	NA	NA	NA	22	25	23	25	3.0%	NA	3.0%
Nature Ecology and Evolution	NA	NA	NA	354	344	308	317	278	293	326	-2.4%	-4.3%	1.4%
Global Ecology and Biogeography	137	137	134	127	126	189	178	187	167	184	4.4%	5.0%	-0.1%
Biodiversity and Conservation	211	214	179	200	219	267	211	247	193	225	1.1%	2.3%	-0.5%
Journal of Biogeography	203	219	213	257	234	275	230	203	207	224	0.0%	3.4%	-0.6%
Oikos	162	178	187	179	167	185	161	220	168	170	0.4%	-0.2%	-1.1%
Ecology and Evolution	391	497	730	981	1081	1191	1156	1325	1179	1153	12.4%	21.2%	-1.2%
NeoBiota	NA	17	24	24	19	62	84	73	56	88	23.8%	35.4%	-1.2%
Global Change Biology	322	379	323	451	516	433	548	541	497	537	5.9%	8.7%	-1.4%
Biological Conservation	332	417	371	425	434	402	449	449	325	466	1.4%	3.6%	-2.1%
Preslia	21	18	16	12	16	14	16	14	16	14	-2.6%	-4.6%	-2.6%
Basic and Applied Ecology	79	79	76	62	78	57	73	144	98	72	2.5%	-3.0%	-4.2%
Plant Sociology	23	10	11	41	10	13	15	17	13	14	-1.9%	-3.0%	-4.6%
Restoration Ecology	103	113	111	129	172	214	239	272	227	214	11.5%	16.4%	-5.0%
Forest Ecology and Management	556	455	606	611	625	736	696	1155	582	737	5.0%	6.1%	-5.0%
Hacquetia	17	17	19	11	15	23	17	26	20	15	2.0%	1.3%	-6.2%
Ecography	129	128	127	136	177	235	156	144	133	128	0.9%	7.9%	-6.5%
Plant Ecology	130	131	128	106	119	97	110	110	74	99	-4.3%	-4.1%	-6.9%
Journal of Ecology	159	157	166	167	200	284	246	245	222	183	4.4%	10.0%	-9.4%
Flora	86	85	121	157	180	210	213	245	219	157	10.6%	19.2%	-9.8%
Applied Vegetation Science	74	72	72	65	62	61	78	77	73	56	-0.9%	-1.1%	-9.9%
Alpine Botany	19	14	16	17	17	17	15	32	16	13	0.4%	-0.9%	-10.6%
Global Ecology and Conservation	46	138	87	87	146	285	589	548	397	417	29.6%	41.0%	-12.7%
Folia Geobotanica	33	36	31	36	32	24	23	21	23	12	-9.1%	-6.4%	-17.0%
Phytocoenologia	17	23	28	26	29	22	16	8	11	6	-12.8%	-0.8%	-23.1%
Tuexenia	25	21	23	26	26	20	30	23	16	14	-4.1%	2.1%	-23.3%
Journal of Vegetation Science	144	118	129	120	105	131	131	126	63	49	-8.0%	-1.0%	-30.5%
Total	**3844**	**4127**	**4612**	**5387**	**5894**	**6790**	**7327**	**8901**	**8153**	**8374**	**10.3%**	**12.0%**	**3.2%**
Mega-journals from MDPI and Frontiers	**79**	**151**	**186**	**220**	**367**	**749**	**986**	**1689**	**2456**	**2356**	**49.5%**	**50.5%**	**34.8%**
Other journals	**3765**	**3976**	**4426**	**5167**	**5527**	**6041**	**6341**	**7212**	**5697**	**6018**	**6.2%**	**9.8%**	**-3.9%**

nals get included in the relevant databases and thus receive the respective metrics only after a couple of years. The criteria for inclusion and the timeline are relatively transparent and straightforward in the case of Scopus, but not so much in the case of WoS. Before inclusion into the two main bibliometric databases, there were only the VCS profiles on Google Scholar (https://scholar.google.com/citations?hl=de&user=XsKKBm0AAAAJ) and Research Gate (https://www.researchgate.net/journal/Vegetation-Classification-and-Survey-2683-0671) that delivered a rough idea which articles were cited and how often. Fortunately, in 2022 VCS was included in the Scopus database and thus received its first $CiteScore_{2022}$ of 2.0 in summer 2023, with monthly updated CiteScoreTracker since then. However, it is unclear when the inclusion in the WoS will follow.

From communication with potential authors, we know that the lack of a JIF and the relatively low first CiteScore are major reasons not to select VCS as a publication outlet. The challenge is not only that JIF and CiteScore are not available at all in the initial years of a journal, but when they are finally published, they reflect the citation performance of articles several years back. For example, the JIF published in year x evaluates the papers published in years $x - 3$ and $x - 2$, the CiteScore refers to years $x - 1$, $x - 2$, $x - 3$ and $x - 4$ and the CiteScoreTracker to the years x, $x - 1$, $x - 2$ and $x - 3$. As it is normal that with time the reputation of a journal grows and thus better articles can be attracted, the lag-phase of the usual bibliometric indices is a challenge. To overcome this, we used the Scopus database to assess the specific performance of articles of individual years, namely the initial four years of VCS, and compared them to that of the same 29 other ecological journals as above (Table 2, Suppl. material 1). Since any article accumulates more citations with time, the pure number of citations is also not informative, but it needs to be normalized by the number of citations received by an average article in the field from the same year. Thus, our approach is similar to the Source Normalized Impact per Paper (SNIP) provided by the Scopus database and the Journal Citation Indicator (JCI) of the WoS (see Suppl. material 1), but we did it individually for each year, and we used our set of 30 journals as reference instead of one of the Scopus-defined subject fields. We found that, on average, articles in this selection were cited 0.89 times in the year of publication, 3.33 times in the subsequent year, 4.79 times in the second and finally 6.03 times in the third year after publication. Our ad-hoc normalized citation rate per paper resulted from the division of the citation rate in a specific journal by the average citation rate for that year (Table 2). Thus, it is above 1 if the articles of that journal were cited more than the average of all articles from the 30 journals in that year and below 1 if they had below-average citation rates. Unlike JIFs or absolute numbers of citations, which do not have a meaning in themselves, a normalized citation rate can be directly interpreted.

We found that the normalized citation rate of VCS was around 0.2 in the first two years, i.e. articles from 2020 and 2021 received only one fifth of the citations of average ecological papers (Table 2, Suppl. material 1). However, in 2022 this value increased to 0.34 and in 2023 to 0.86. VCS' rank among the 30 journals was 28th in the first two years, 26th in 2022 and 14th in 2023 (Table 2, Figure 1, Suppl. material 1). The average articles of VCS in 2023 thus had a similar performance as those of Alpine Botany (0.86) and Biodiversity and Conservation (0.75), and the normalized citation rate was even higher than for the two other IAVS journals, Journal of Vegetation Science (0.73) and Applied Vegetation Science (0.47) (Table 2, Suppl. material 1). VCS articles of 2023 received on average about 1/3 of the citations of the journal with the highest citation rate (Global Change Biology: 2.82), but more than two times as many than Phytocoenologia (0.38) (Table 2, Figure 1, Suppl. material 1). With a mean annual increase of 0.18, VCS had the strongest positive trend in normalized citation rates among all compared journals (Table 2, Suppl. material 1). However, it must be noted that in a journal that publishes so relatively few articles per year as VCS, a single high-impact paper can have a considerable influence on the normalized citation rate (or the SNIP). There was one such paper in 2023 (Dengler et al. 2023b, see next section), which alone got 8 citations to date. However, if we would remove this paper, the normalized citation rate of 2023 papers would still be 0.45, i.e. a clear increase compared to 2022 and very similar to Applied Vegetation Science.

Projections into the future

We present the above analyses because we feel that normalized citation rates are meaningful measures by which to compare the citation impact of different journals, whether these measures be Web of Science' Journal Citation Indicator (JCI), the Scopus' Source Normalized Impact per Paper (SNIP) for multiple years, or our *ad hoc* normalized citation rate for individual years. Nonetheless, most researchers probably still rely on the "traditional" metrics, namely Web of Science' Journal Impact Factor (JIF) and Scopus' CiteScore. These metrics are all strongly correlated as they measure similar things, even though they vary in the number of citing journals considered, the years included in the calculations, and the delimitation of the subject fields. For example, the JIF_{2022} can be well predicted by a linear function of the $CiteScore_{2022}$ for the 28 journals in our selection that were included in WoS (based on the numbers in Suppl. material 1):

$$(1)\ JIF = -0.398 + 0.626 \cdot CiteScore\ (R^2 = 0.968)$$

Taking this formula and VCS' CiteScore of 2.0 in 2022, this would result in an approximate JIF_{2022} of 0.9 if VCS had been included in the WoS. As the values of the $CiteScore_{2023}$ and JIF_{2023} to be released in summer 2024 are based on the citation performance of articles published 2020–2023 and 2021–2022, respectively, there is a solid basis for forecasts as the citation rates of the relevant articles are accessible. The $CiteScoreTracker_{2023}$ provides one such estimate for the $CiteScore_{2023}$ as it approaches

Table 2. Citation rates of 30 selected ecological journals in 2023 for their content in the years 2020 to 2023. The values were extracted from the Scopus database (https://www.scopus.com/) on 23 December 2023, which could mean that the latest papers and citations in various journals were likely missed. Nonetheless, the effect on the normalized citation rate should be minimal. VCS is highlighted in blue and the two other IAVS journals in green. The citation rate is the ratio of received citations to the number of articles published. The normalized citation rate results from the division of the citation rate by the average citation rate of all articles of all 30 journals in that year. The annual trend in the last column is the slope of a linear regression applied to the normalized citation rates. The table is sorted by decreasing normalized citation rate for the articles of 2023. The underlying raw data (number of papers and citations to these per publication year) as well as further common citation metrics from Scopus and Web of Science are provided in Suppl. material 1 as an editable spreadsheet.

Journal	Citation rate 2023 for papers of...				Normalized citation rate 2023 for papers of...				Annual linear trend of normalized citation rate
	2020	2021	2022	2023	2020	2021	2022	2023	
Global Change Biology	14.48	12.62	9.20	2.50	2.40	2.65	2.76	2.82	0.14
Agriculture, Ecosystems & Environment	8.27	7.49	5.54	1.72	1.37	1.57	1.66	1.94	0.18
Nature Ecology & Evolution	13.94	10.72	5.92	1.71	2.31	2.25	1.77	1.93	-0.16
Ecology Letters	11.86	8.17	7.43	1.26	1.97	1.72	2.23	1.41	-0.11
Ecography	7.65	6.79	4.98	1.13	1.27	1.43	1.49	1.27	0.01
Journal of Biogeography	4.99	3.93	3.12	1.09	0.83	0.83	0.94	1.22	0.13
Global Ecology and Biogeography	8.67	7.54	5.91	0.97	1.44	1.59	1.77	1.10	-0.08
Biological Conservation	7.11	5.77	4.02	0.96	1.18	1.21	1.20	1.09	-0.03
Journal of Ecology	7.01	6.38	4.99	0.95	1.16	1.34	1.50	1.07	-0.01
Restoration Ecology	5.35	4.26	2.91	0.93	0.89	0.90	0.87	1.04	0.04
Forest Ecology and Management	4.67	4.35	3.39	0.85	0.77	0.91	1.02	0.96	0.06
Neobiota	5.04	5.39	2.32	0.85	0.84	1.13	0.69	0.96	-0.01
Alpine Botany	2.40	4.00	1.68	0.76	0.40	0.84	0.50	0.86	0.11
Vegetation Classification and Survey	**1.27**	**0.92**	**1.14**	**0.76**	**0.21**	**0.19**	**0.34**	**0.86**	**0.21**
Biodiversity and Conservation	4.45	3.32	2.59	0.67	0.74	0.70	0.78	0.75	0.01
Basic and Applied Ecology	5.27	3.61	2.75	0.67	0.87	0.76	0.82	0.75	-0.03
Journal of Vegetation Science	**2.94**	**3.17**	**1.40**	**0.64**	**0.49**	**0.67**	**0.42**	**0.73**	**0.05**
Diversity	2.88	2.43	1.95	0.60	0.48	0.51	0.59	0.68	0.07
Hacquetia	0.53	0.62	0.68	0.60	0.09	0.13	0.21	0.68	0.18
Preslia	1.46	4.22	2.94	0.55	0.24	0.89	0.88	0.61	0.11
Global Ecology and Conservation	5.61	4.21	3.07	0.54	0.93	0.89	0.92	0.61	-0.09
Flora	2.21	1.86	1.47	0.52	0.37	0.39	0.44	0.59	0.07
Frontiers in Ecology and Evolution	4.06	3.14	1.77	0.51	0.67	0.66	0.53	0.57	-0.04
Applied Vegetation Science	**4.09**	**2.87**	**1.64**	**0.42**	**0.68**	**0.60**	**0.49**	**0.47**	**-0.07**
Ecology and Evolution	3.26	2.72	1.76	0.40	0.54	0.57	0.53	0.45	-0.03
Plant Ecology	1.95	2.07	1.98	0.37	0.32	0.43	0.59	0.42	0.04
Phytocoenologia	1.69	0.89	0.45	0.33	0.28	0.19	0.14	0.38	0.02
Plant Sociology	1.93	3.24	1.23	0.10	0.32	0.68	0.37	0.11	-0.09
Folia Geobotanica	1.44	1.80	0.81	0.00	0.24	0.38	0.24	0.00	-0.09
Tuexenia	1.07	1.17	0.14	0.00	0.18	0.25	0.04	0.00	-0.07
All	**6.03**	**4.76**	**3.33**	**0.89**	**1.00**	**1.00**	**1.00**	**1.00**	**0.00**

this value asymptotically until summer 2024. For VCS the CiteScoreTracker stands at 2.4 as of December 2023. Inserting this value into formula (1) would result in a JIF_{2023} of 1.1 if VCS is included into WoS by summer 2024.

However, as discussed above, the citation metrics released in 2024 do not reflect where a journal stands in 2024, but where it stood a couple of years ago, which can make a big difference for journals that develop dynamically like VCS (see Table 2, Figure 1). Thus, we tried to retrieve estimates for CiteScores and potential JIFs for 2024 and 2025. For the $CiteScore_{2022}$ we found that it can be best predicted by the normalized citation rate for the penultimate ($R^2 = 0.922$), second best by that of the previous year ($R^2 = 0.896$), and least by that of the same year ($R^2 = 0.792$) (using the values in Suppl. material 1). This behaviour is plausible as the papers two years back get many more citations in a specific year than those in the same year (in our dataset more than five times more, see Table 1), meaning that the "quality" of the older papers from the evaluation period has a disproportionate influence on the citation metrics. The regression function of the CiteScore in year x vs. the normalized citation rate in year $x - 2$ is as follows:

$$(2)\ CiteScore_x = 0.342 + 8.499 \cdot \text{normalized citation rate}_{x-2} \quad (R^2 = 0.922)$$

This means that the 2024 edition of the CiteScores/JIFs released in 2025 will be dominated by the quality of the papers published in 2022, and the 2025 edition released in 2026 by the papers from 2023. Applying our formulas (1) and (2), assuming that they are largely time-invariant, the

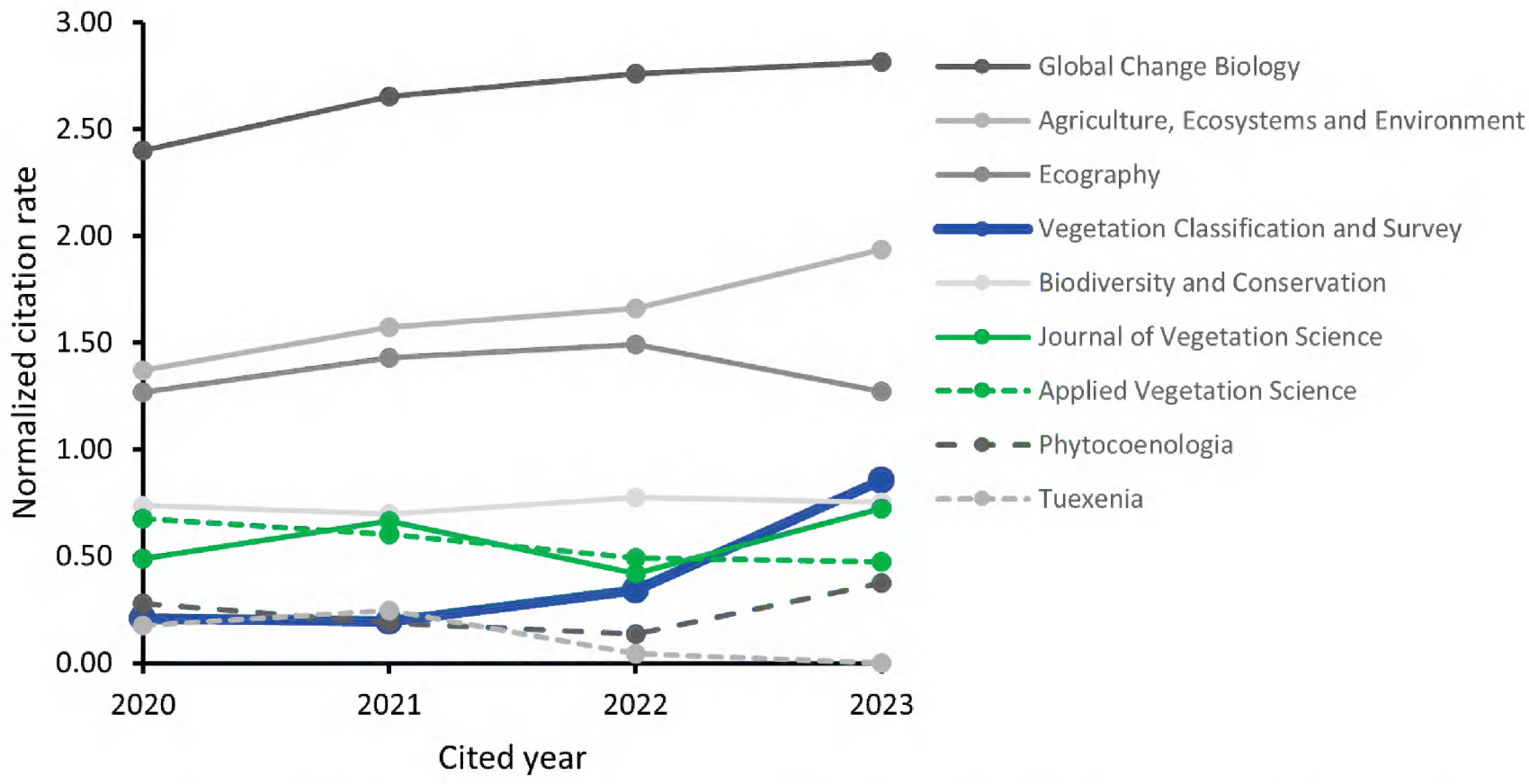

Figure 1. Development of the normalized citation rate for selected ecological journals over the past four years. Citations refer to citations in any journal included in the Scopus database in the year 2023 to articles of the year on the x-axis in the given journal. Normalization was done over all articles published in the 30 journals of Table 2 in the respective year. Accordingly, a value of 1.0 means a citation rate corresponding to the mean citation rate of all articles of the 30 journals in the respective year (averaged on a per-article base), while 1.5 means a 50% higher and 0.5 a 50% lower citation rate. For visibility reasons only 9 out of the 30 journals are shown, including the most-cited and least-cited journal, as well as VCS and the two other IAVS journals (coloured). Over the four-year period, VCS shows an accelerated increase in citation rate, Applied Vegetation Science a monotonous decrease and Journal of Vegetation Science strong interannual fluctuations without clear trend (for details see Table 2 and Suppl. material 1).

normalized citation rates of VCS in 2022 and 2023 (0.34 and 0.86), yields the following predictions:

$$\text{CiteScore}_{2024,\ \text{predicted}} = 3.2$$

$$\text{CiteScore}_{2025,\ \text{predicted}} = 7.5$$

$$\text{JIF}_{2024,\ \text{predicted}} = 1.6$$

$$\text{JIF}_{2025,\ \text{predicted}} = 4.3$$

These predictions are of course associated with some errors due to the application of one or, in the case of JIF, even two regressions, albeit both R^2 values are well above 0.9. However, being aware that the publications in the past are the sole source of the citation metrics in the future makes this whole exercise far less speculative than it might appear at first glance. We shall come back to these predictions in future editorials when we know the actual outcome.

Most-cited papers in VCS

Although it is possible to see which papers of VCS received the most citations to date in Scopus (https://www.scopus.com/sourceid/21101083451) and in Google Scholar (https://scholar.google.com/citations?hl=de&user=XsKKBm0AAAAJ) based on their respective databases, a simple ranking would ignore that every article over time collects more and more citations. To find out which papers in VCS were cited above average thus requires a standardisation like the SNIPs for journals. In Scopus such values are called Field-Weighted Citation Impact (FWCI) and are available for all papers. As in the case of SNIPs and our own normalized citation rates for journals, a FWCI value above 1 means above-average citation rate. Using this criterion, we selected the 12 out of the hitherto 95 published VCS articles that were cited more than average from the subject fields in which Scopus has placed VCS (namely "Agricultural and Biological Sciences (miscellaneous)"; "Plant Science"; "Ecology, Evolution, Behavior and Systematics") (Table 3). Although, in absolute numbers, Zeballos et al. (2020) on the classification of dry subtropical forests in Argentina has received the highest number of citations so far (18), Dengler et al. (2023b, the presentation of the Ecological Indicator Values for Europe), has already eight citations despite it is less than one year old, which corresponds to an FWCI of 15.2. While the high-impact papers stem from different article categories, except Database Reports and Nomenclatural Proposals, it seems that methodological papers are particularly often cited as all three publications in the category "VCS Methods" made it into the high-impact list (Table 3). It is very positive that also various presentations of classification systems are among our top-12, including three from South America, two from Asia and one from Australia (Table 3). Thus, VCS here nicely complements our sister journal Applied Vegetation Science, which regularly publishes broad-scale classification systems from Europe, but only very rarely from other continents. The relatively high

Table 3. The 12 articles in VCS that had been cited above average compared to the subject fields of VCS until December 2023 (based on the Scopus database; https://www.scopus.com). The table is sorted by decreasing Field-Weighted Citation Impact (FWCI).

FWCI	Citations	VCS category	Citation	Year	Title
15.20	8	VCS Methods	Dengler et al. (2023b)	2023	Ecological Indicator Values for Europe (EIVE) 1.0
3.02	7	Research Paper	Luebert and Pliscoff (2022)	2022	The vegetation of Chile and the EcoVeg approach in the context of the International Vegetation Classification project
2.28	18	Research Paper	Zeballos et al. (2020)	2020	The lowland seasonally dry subtropical forests in central Argentina: vegetation types and a call for conservation
2.03	17	Research Paper	Nowak et al. (2020)	2020	Classification of tall-forb vegetation in the Pamir-Alai and western Tian Shan Mountains (Tajikistan and Kyrgyzstan, Middle Asia)
1.90	1	VCS Methods	Dengler and Dembicz (2023)	2023	Should we estimate plant cover in percent or on ordinal scales?
1.90	1	Research Paper	Chakkour et al. (2023)	2023	Plant diversity in traditional agroecosystems of North Morocco
1.72	4	Research Paper	Liu et al. (2022)	2022	Vegetation classification of *Stipa* steppes in China, with reference to the International Vegetation Classification
1.38	8	VCS Methods	Janišová et al. (2021)	2021	Grassland with tradition: sampling across several scientific disciplines
1.29	4	Review and Synthesis	Loidi et al. (2022)	2022	Climatic definitions of the world's terrestrial biomes
1.29	3	Research Paper	Montenegro-Hoyos et al. (2022)	2022	Plant diversity and structure in desert communities of the Andean piedmont in Ica, Peru
1.26	12	Forum Paper	Willner (2020)	2020	What is an alliance?
1.01	8	Research Paper	Hunter and Hunter (2020)	2020	Montane mire vegetation of the New England Tablelands Bioregion of Eastern Australia

citation rates for some of these studies demonstrate that there is a real need for such publications, and VCS thus fills an important niche.

Outstanding papers in 2023

As in every year, to highlight outstand papers, we selected one Editors' Choice paper per quarter and from these four papers, we selected one for the annual Editors' Award (Dengler et al. 2022). The selected articles are permanently labelled as such with a banner in the online presentation of the journal. Both are also highlighted in various media of VCS, namely the VCS Newsletter, the News section on the VCS website and the vegsciblog of IAVS. In addition, The Editors' Award comes with the right to provide the photos or other illustrations for the cover of the respective VCS volume, and the first author receives a certificate and prize from the publisher.

The Editors' Award 2023 goes to the Editors' Choice paper of the fourth quarter by Ben and Marianne Strohbach. They provided a comprehensive syntaxonomic description of the Karstelveld vegetation in Namibia (Strohbach and Strohbach 2023), a contribution to the Special Collection "African vegetation studies" (see https://vcs.pensoft.net/collection/316/). Based on 889 relevés of 1000 m^2 extracted from the Phytosociological Database of Namibia, the authors distinguished four main vegetation types by mean of TWINSPAN: wetlands and associated grasslands, transitional vegetation between Thornbush savanna and Karstveld, Kalahari type sandy vegetation and true Karstveld vegetation types. Each main vegetation type was further divided in more detailed plant communities, 17 of them being formally described as new plant associations. All associations are clearly defined by diagnostic species. The authors described the true Karstveld vegetation as a new phytosociological class *Terminalietea prunoides*, with eight associations, two new orders and three new alliances. The description of these vegetation units was completed with the comparison of their structure and diversity and intuitive visualisation of catenas representing their position along topographic gradients. A concluding remark of the authors concerns the high species richness of this region, which is seriously threatened in some areas that are not protected inside the Etosha National Park or private nature reserves and conservancies. This study is outstanding because formal syntaxonomic vegetation classification is still rare in Africa as a whole and mostly restricted to the francophone parts of North Africa. In other regions, there have been only very few such studies (e.g. Luther-Mosebach et al. 2012; Behn et al. 2022). We hope that the current paper will be a first in a series that eventually leads to a comprehensive synopsis of the plant communities of Namibia.

The Editors' Choice of the first quarter went to Elvira Casagranda and Andrea Izquierdo. This article (Casagranda and Izquierdo 2023) is part of the ongoing Special Collection "Neotropical vegetation" (see https://vcs.pensoft.net/collection/350/). The authors studied the *vegas* of Argentina, a very peculiar wetland vegetation of the high elevations of the Andes and particular the Altiplano, at elevations of 3,300–5,000 m a.s.l. The *vegas* are dominated by graminoids forming dense cushions, embedded in which various tiny forbs can live. The authors could distinguish two main types, which are dominated either by *Juncaceae* (*Oxychloe andina*, *Distichia muscoides*) or *Cyperaceae* (*Eleocharis pseudoalbibracteata*, *Zameioscirpus atacamensis*). Applying species distribution modelling (SDM) techniques, the authors were able to effectively predict the occurrence of the two main *vegas* types throughout the Argentinean Andes. This paper

demonstrates the merit of transferring a statistical technique from a neighbouring field to vegetation typology.

The Editors' Choice of the second quarter went to Gonzalo Navarro and colleagues for their "Review and Synthesis" article in the same ongoing Special Collection "Neotropical vegetation" (Navarro et al. 2023). The authors provide a synthetic overview of the terrestrial vegetation of South America. They use the concept of "geocomplex biomes" of which they distinguish 33 on the continent. These units are grouped into 16 "macrobiomes" within the four macroclimates "tropical", "mediterranean", "temperate" and "boreal". Each of the "geocomplex biomes" is visualised by one or several drawings that illustrate typical sequences of vegetation types along landscape gradients (catenas). These figures provide the reader with a realistic picture of the landscape and what the driving forces are. The descriptions of the "geocomplex biomes" are very dense in information, based on extensive field studies by the authors throughout the continent and a comprehensive literature review. This contribution is prototypic for what we envisage under "Review and Synthesis" articles. They are like textbooks or textbook chapters; as authoritative as these, but more concise. Compared to normal research articles, they can be longer, as in this case (40 pp.). We hope that this contribution will contribute to a better understanding of the diverse vegetation of South America and at the same time inspire other author teams to consider VCS as outlet for comparable synthetic treatments.

The Editors' Choice of the third quarter went to Sebastián Zeballos and colleagues for another paper in the Special Collection "Neotropical Vegetation" (Zeballos et al. 2023). The authors provide a new hierarchical classification of the vegetation in the Arid Chaco in Central-Western Argentina, based on more than 600 relevés. The endemic-rich vegetation in the region mainly consists of xerophytic shrublands and forests. This contribution is particularly welcome because there have been few broad-scale plot-based vegetation syntheses in South America.

Changes in the Editorial Board

The Editorial Board of VCS consists of the Chief Editors, the Associate Editors, the Guest Editors, the Linguistic Editors and the Editorial Review Board. While the Associate and Guest Editors manage the peer review of a paper and make the editorial decisions, the members of the Editorial Review Board are those experts from around the world who serve as the primary pool of reviewers. These members know the journal and are committed to it; thus, they usually provide better and faster reviews than external reviewers. We are happy to announce that as of 2024 we have appointed two new Associate Editors with broad expertise in Asia and Africa: Alireza Naqinezhad (University of Mazandaran, Babolsar, Iran) and Gaolathe Tsheboeng (University of Botswana, Gaborone, Botswana). They previously did and are still doing an excellent job as Guest Editors in one of our Special Collections. Further we appointed four new members to the Editorial Review Board: Angie Montenegro-Hoyos (University of La Serena, Chile), Cloe Xochitl Pérez Valladares (Universidad Nacional Autónoma de México, Mexico), Jean-Paul Theurillat (University of Geneva, Switzerland) and Denys Vynokurov (M.G. Kholodny Institute of Botany, Kyiv, Ukraine). Welcome to the team!

Outlook

Starting a new OA journal within a narrow field of science remains a challenge, even after four years. However, we are doing quite well, thanks to the exciting manuscripts submitted by our authors, the great service provided by our dedicated Editorial Board, the financial support by IAVS and the technical support by our publisher Pensoft. Numbers of articles and pages show a positive trend – unlike the majority of ecological and particularly vegetation ecological journals. VCS has already been included in the Scopus bibliometric database in 2022 and received its first CiteScore in summer 2023. Projections based on annual normalized citation rates demonstrated that VCS is improving its relative position compared to other journals in the field – due to articles that attract above-average citations. We provided an overview of articles that are particularly used by other scientists, which might inspire potential authors how to write their articles if they wish to receive many citations. We hope to continue this road of success together with you and thus invite you to submit exciting manuscripts from the fields of vegetation classification and ecoinformatics – which is facilitated by the fact that during 2024, due to IAVS and our innovative APC pricing model, most authors can still publish for free or a very low fee if they are members of IAVS.

Author contributions

J.D. planned and drafted this editorial while all other authors revised and approved it.

Acknowledgements

We thank Don Faber-Langendoen for linguistic review.

References

Beall J (2012) Predatory publishers are corrupting open access. Nature 489: 179–179. https://doi.org/10.1038/489179a

Behn K, Alvarez M, Mutebi S, Becker M (2022) Vegetation diversity in East African wetlands: Cocktail algorithms supported by a

vegetation-plot database. Phytocoenologia 51: 199–219. https://doi.org/10.1127/phyto/2022/0392

BOAI (2002) Budapest Open Access Initiative. https://www.budapestopenaccessinitiative.org/read/ [accessed 30 Jul 2023]

Bohannon J (2013) Who's afraid of peer review? Science 342: 60–65. https://doi.org/10.1126/science.342.6154.60

Casagranda E, Izquierdo AE (2023) Modeling the potential distribution of floristic assemblages of high Andean wetlands dominated by *Juncaceae* and *Cyperaceae* in the Argentine Puna. Vegetation Classification and Survey 4: 47–58. https://doi.org/10.3897/VCS.95779

Chakkour S, Bergmeier E, Meyer S, Kassout J, Kadiri M, Ater M (2023) Plant diversity in traditional agroecosystems of North Morocco. Vegetation Classification and Survey 4: 31–45. https://doi.org/10.3897/VCS.86024

Chytrý M, Pillar VD, Price JN, Wagner V, Wiser SK, Zelený D (2023) The benefits of publishing in society-owned scientific journals. Journal of Vegetation Science 26: e12705. https://doi.org/10.1111/avsc.12705

Cobo C (2014) (Gold) open access: the two sides of the coin. https://archive.ph/GstOK [accessed 26 Feb 2023]

Dengler J (2023) Priorities in journal selection for authors, reviewers, editors, librarians and science funders. Vegetation Classification and Survey 4: 219–229. https://doi.org/10.3897/VCS.110296

Dengler J, Dembicz I (2023) Should we estimate plant cover in percent or on ordinal scales? Vegetation Classification and Survey 4: 131–138. https://doi.org/10.3897/VCS.98379

Dengler J, Biurrun I, Jansen F, Willner W (2022) Vegetation Classification and Survey: development and diversification. Vegetation Classification and Survey 3: 1–5. https://doi.org/10.3897/VCS.80379

Dengler J, Biurrun I, Jansen F, Willner W (2023a) Vegetation Classification and Survey in the third year. Vegetation Classification and Survey 4: 1–6. https://doi.org/10.3897/VCS.100394

Dengler J, Jansen F, Chusova O, Hüllbusch E, Nobis MP, Van Meerbeek K, Axmanová I, Bruun HH, Chytrý M, … Gillet F (2023b) Ecological Indicator Values for Europe (EIVE) 1.0. Vegetation Classification and Survey 4: 7–29. https://doi.org/10.3897/VCS.98324

Hunter JT, Hunter VH (2020) Montane mire vegetation of the New England Tablelands Bioregion of Eastern Australia. Vegetation Classification and Survey 1: 37–51. https://doi.org/10.3897/VCS/2020/48765

Janišová M, Iuga A, Ivaşcu CM, Magnes M (2021) Grassland with tradition: sampling across several scientific disciplines. Vegetation Classification and Survey 2: 19–35. https://doi.org/10.3897/VCS/2021/60739

Jansen F, Biurrun I, Dengler J, Willner W (2020) Vegetation classification goes open access. Vegetation Classification and Survey 1: 1–6. https://doi.org/10.3897/VCS/2020/53445

Liu C, Qiao X, Guo K, Zhao L, Pan Q (2022) Vegetation classification of *Stipa* steppes in China, with reference to the International Vegetation Classification. Vegetation Classification and Survey 3: 121–144. https://doi.org/10.3897/VCS.72875

Loidi J, Navarro-Sánchez G, Vynokurov D (2022) Climatic definitions of the world's terrestrial biomes. Vegetation Classification and Survey 3: 231–271. https://doi.org/10.3897/VCS.86102

Luebert F, Pliscoff P (2022) The vegetation of Chile and the EcoVeg approach in the context of the International Vegetation Classification project. Vegetation Classification and Survey 3: 15–28. https://doi.org/10.3897/VCS.67893

Luther-Mosebach J, Dengler J, Schmiedel U, Röwer IU, Labitzki T, Gröngröft A (2012) A first formal classification of the Hardeveld vegetation in Namaqualand, South Africa. Applied Vegetation Science 15: 401–431. https://doi.org/10.1111/j.1654-109X.2011.01173.x

Montenegro-Hoyos A, Vega N, Linares-Palomino R (2022) Plant diversity and structure in desert communities of the Andean piedmont in Ica, Peru. Vegetation Classification and Survey 3: 53–66. https://doi.org/10.3897/VCS.68006

Navarro G, Luebert F, Molina JA (2023) South American terrestrial biomes as geocomplexes: a geobotanical landscape approach. Vegetation Classification and Survey 4: 75–114. https://doi.org/10.3897/VCS.96710

Nowak A, Świerszcz S, Nowak S, Nobis M (2020) Classification of tall-forb vegetation in the Pamir-Alai and western Tian Shan Mountains (Tajikistan and Kyrgyzstan, Middle Asia). Vegetation Classification and Survey 1: 191–217. https://doi.org/10.3897/VCS/2020/60848

Oviedo-García MÁ (2021) Journal citation reports and the definition of a predatory journal: The case of the Multidisciplinary Digital Publishing Institute (MDPI). Research Evaluation 30: 405–419. https://doi.org/10.1093/reseval/rvab020

Smith AC, Merz L, Borden JB, Gulick CK, Kshirsagar AR, Bruna EM (2021) Assessing the effect of article processing charges on the geographic diversity of authors using Elsevier's "Mirror Journal" system. Quantitative Science Studies 2: 1123–1143. https://doi.org/10.1162/qss_a_00157

Strohbach BJ, Strohbach MM (2023) A first syntaxonomic description of the vegetation of the Karstveld in Namibia. Vegetation Classification and Survey 4: 241–284. https://doi.org/10.3897/VCS.99045

Willner W (2020) What is an alliance? Vegetation Classification and Survey 1: 139–144. https://doi.org/10.3897/VCS/2020/56372

Zeballos SR, Giorgis MA, Cabido MR, Acosta ATR, del Rosario Iglesias M, Cantero JJ (2020) The lowland seasonally dry subtropical forests in central Argentina: vegetation types and a call for conservation. Vegetation Classification and Survey 1: 87–102. https://doi.org/10.3897/VCS/2020/38013

Zeballos SR, Acosta ATR, Agüero WD, Ahumada RJ, Almirón MG, Argibay DS, Arroyo DN, Blanco LJ, Biurrun FN, … Cabido MR (2023) Vegetation types of the Arid Chaco in Central-Western Argentina. Vegetation Classification and Survey 4: 167–188. https://doi.org/10.3897/VCS.100532

E-mail and ORCID

Jürgen Dengler (Corresponding author, juergen.dengler@zhaw.ch), ORCID: https://orcid.org/0000-0003-3221-660X
Idoia Biurrun (idoia.biurrun@ehu.eus), ORCID: https://orcid.org/0000-0002-1454-0433
Florian Jansen (florian.jansen@uni-rostock.de), ORCID: https://orcid.org/0000-0002-0331-5185
Wolfgang Willner (wolfgang.willner@univie.ac.at), ORCID: https://orcid.org/0000-0003-1591-8386

Appendix 1: Linguistic Editors for VCS during the last year

We thank the following colleagues for their invaluable contribution as Linguistic Editors for VCS (number of edited papers in brackets):

Stephen Bell (2)
Don Faber-Langendoen (1)
Michael Glaser (4)
Jim Martin (2)
Meghan J. McNellie (3)
Hallie Seiler (3)
Lynda Weekes (2)

Appendix 2: Reviewers for VCS during the last year

We thank the following colleagues who served during the last year (November 2022 – October 2023) as reviewers for VCS (number of reviews in brackets).

Erwin Bergmeier (2)
Idoia Biurrun (1)
Jorge Capelo (5)
Andraz Carni (2)
Victor Chepinoga (1)
Timo Conradi (3)
Romeo Di Pietro (1)
Federico Fernández-González (1)
Scott Franklin (2)
Antonio Galán de Mera (3)
François Gillet (2)
Joaquín Giménez de Azcárate (2)
Melisa A. Giorgis (1)
Riccardo Guarino (2)
Behlül Güler (1)
Rense Haveman (2)
Katarína Hegedüšová (1)
Florian Jansen (2)
Attila Lengyel (2)
Federico Luebert (1)
Isolda Luna-Vega (1)
Angie Montenegro Hoyos (1)
Alireza Naqinezhad (2)
Gonzalo Navarro-Sánchez (1)
Michael P. Nobis (1)
Jalil Noroozi (1)
Pavel Novák (1)
Bianca Ott Andrade (1)
Jens Pallas (1)
Cloe Peréz Valladares (1)
Rasmus Revermann (4)
Jan Roleček (1)
Simona Sarmati (1)
Ute Schmiedel (1)
Urban Šilc (1)
Sebastian Świerszcz (1)
Amir Talebi (2)
Jean Paul Theurillat (3)
Gaolathe Tsheboeng (3)
Kiril Vassilev (1)
Jose Alejandro Velazques Montes (1)
Denys Vynokurov (4)
Viktoria Wagner (2)
Wolfgang Willner (2)
David Zelený (1)

Supplementary material

Supplementary material 1
Publication and citation numbers, citation rates and normalized citation rates 2020–2023 as well as some current citation metrics from Scopus and Web of Science for the 30 ecological journals compared in this study (*.xlsx).
Link: https://doi.org/10.3897/VCS.118454.suppl1